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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,605	03/30/2004	Thomas J. Foster	H10488/JDP	3193
1333 7590 07/02/2007 EASTMAN KODAK COMPANY PATENT LEGAL STAFF 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER VO, QUANG N	
			ART UNIT 2625	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/812,605	Applicant(s) FOSTER ET AL.	
	Examiner Quang N. Vo	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a): In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/27/05</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 9 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,975,411. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of claim 9 are similar to claim 7 of U.S. Patent 6,975,411.

With regard to claim 9, it is drawn to a method of printing an image comprising the steps of: converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; defining each pixel as a background pixel, interior pixel, edge pixel, one line pixel, or two line pixel; and, reassigning the digital value of one or more interior pixel, edge pixel, one line

pixel, or two line pixels independently, thereby altering the appearance of the image when printed in order to compensate for printer nonuniformities.

Regarding claim 7 of US Patent 6,975,411 it discloses an electrostatographic recording method for printing an image on a receiver comprising the steps of: operating a primary charger to establish a uniform primary voltage level on an image recording member; developing a control patch on the image recording member, measuring density of the control patch to thereby provide a density measurement signal; converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; rendering the digital bitmap by defining each pixel as either a background pixel, interior pixel, edge pixel, one line pixel, or two line pixel and reassigning the digital value of one or more interior pixels, edge pixels, one line pixels, or two line pixels independently and as a function of the density measurement signal; and, modulating electrostatic charge on the image recording member as a function of the digital bitmap after rendering

The subject matter claimed in the instant application is fully disclosed in the referenced US Patent 6,975,411 as follow: converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; defining each pixel as a background pixel, interior pixel, edge pixel, one line pixel, or two line pixel; and, reassigning the digital value of one or more interior pixel, edge pixel, one line pixel, or two line pixels independently, thereby altering the appearance of the image when printed in order to compensate for printer nonuniformities.

Claims 1, 16 provisionally rejected on the ground of nonstatutory double patenting over claim(s) 7 of copending Application No. US2004/0252344. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

Regarding claim 1, it discloses a method of printing an image utilizing a printer having print nonuniformities, the method comprising the steps of: converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; defining each pixel as either a background pixel, interior pixel, or an edge pixel; and, reassigning the digital value of one or more edge pixels or interior pixels independently, thereby altering the appearance of the image when printed in order to compensate for printer nonuniformities.

Regarding claim 7 of copending Application No. US2004/0252344 discloses a method of printing an image comprising the steps of: converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; defining each pixel as either a background pixel, interior pixel, or an edge pixel; and, reassigning the digital value of one or more edge pixels or interior pixels independently, thereby altering the appearance of the image when printed

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant

application are claiming common subject matter, as follows: A method of printing an image comprising the steps of: converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; defining each pixel as either a background pixel, interior pixel, or an edge pixel; and, reassigning the digital value of one or more edge pixels or interior pixels independently, thereby altering the appearance of the image when printed.

With regard to claim 16, the subject matter is similar to claim 1. Therefore, the rejection on claim 16 is the same as claim 1.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claims 19, 27 provisionally rejected on the ground of nonstatutory double patenting over claim 14, 20 of copending Application No. US2004/0252344. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Regarding claim 19: An apparatus for altering the appearance of an input digital image when printed, the digital image comprised of an array of pixels and wherein each

pixel is assigned a digital value representing marking information, the apparatus comprising: a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel; and reassigning the digital value of one or more of the edge pixels or interior pixels independently.

Regarding claim 14 of copending Application No. US2004/0252344 discloses an apparatus for altering the appearance of an input digital image when printed, the digital image comprised of an array of pixels and wherein each pixel is assigned a digital value representing marking information, the apparatus comprising: a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel; and reassigning the digital value of one or more of the edge pixels or interior pixels independently.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: an apparatus for altering the appearance of an image printed on a printer having print nonuniformities, the printer utilizing input digital image data comprised of an array of pixels and wherein each pixel is assigned a digital value representing marking information, the apparatus comprising a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel; and reassigning the digital value of one or more of the edge pixels or interior pixels independently

Regarding claim 27: An apparatus for printing an image comprising: a raster image processor for converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel; and, reassigning the digital value of one or more edge pixels or interior pixels independently, thereby altering the appearance of the image when printed.

Regarding claim 20 of copending Application No. US2004/0252344 discloses an apparatus for printing an image comprising: a raster image processor for converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel; and, reassigning the digital value of one or more edge pixels or interior pixels independently, thereby altering the appearance of the image when printed.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: a raster image processor for converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information; a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel; and, reassigning the digital value of one or more edge pixels or interior pixels independently



Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsukubo et al. (Matsukubo) (Pub. No.: US 2003/0038952).

With regard to claim 1, Matsukubo discloses a method of printing an image utilizing a printer having print nonuniformities (paragraphs 0012, 0025), the method comprising the steps of: converting the image into a digital bitmap (paragraph 0027) comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information (paragraphs 0028, 0122); defining each pixel as either a background pixel, interior pixel, or an edge pixel (paragraphs 0043, 0044, 0045, 0046, 0122); and, reassigning the digital value of one or more edge pixels or interior pixels independently, thereby altering the appearance of the image when printed in order to compensate for printer nonuniformities (paragraphs 0125, 0126, 0127, 0129).

With regard to claim 2, Matsukubo discloses further comprising classifying edge pixels by direction and reassigning the digital value of the edge pixels as a function of direction (paragraph 0128,0129).

With regard to claim 3, Matsukubo discloses wherein the converting step comprises converting the image to a binary digital bitmap and the reassigning step comprises reassigning the binary digital values to multi-bit digital values (paragraphs 0119,0120,0121).

With regard to claim 4, Matsukubo discloses wherein the converting step comprises converting the image to a multi-bit digital bitmap and the reassigning step comprises reassigning the binary digital values to multi-bit digital values (paragraphs 0119,0120,0121).

With regard to claim 5, Matsukubo discloses wherein the reassigning step comprises increasing the value of edge pixels with respect to interior pixels (paragraph 0128).

With regard to claim 6, Matsukubo discloses wherein the reassigning step comprises decreasing the value of edge pixels with respect to interior pixels (paragraphs 0127, 0129).

With regard to claim 7, Matsukubo discloses further comprising performing the defining and reassigning steps two or more times (paragraphs 0126, 0127,0128).

With regard to claim 8, Matsukubo discloses wherein the reassigning step comprises reassigning multiple interior pixel values (paragraph 0126).

With regard to claim 9, Matsukubo discloses a method of printing an image (paragraphs 0012, 0025) comprising the steps of: converting the image into a digital bitmap (paragraph 0027) comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information (paragraphs 0027, 0028); defining each pixel as a background pixel, interior pixel, edge pixel, one line pixel, or two line pixel (paragraphs 0043, 0044, 0045, 0046, 0122); and, reassigning the digital value of one or more interior pixel, edge pixel, one line pixel, or two line pixels independently, thereby altering the appearance of the image when printed in order to compensate for printer nonuniformities (paragraphs 0125, 0126, 0127, 0128, 0129).

With regard to claim 10, Matsukubo discloses further comprising classifying edge pixels by direction and reassigning the digital value of the edge pixels as a function of direction (paragraph 0128, 0129).

With regard to claim 11, Matsukubo discloses wherein the converting step comprises converting the image to a binary digital bitmap and the reassigning step comprises reassigning the binary digital values to multi-bit digital values (paragraphs 0119, 0120, 0121).

With regard to claim 12, Matsukubo discloses wherein the converting step comprises converting the image to a multi-bit digital bitmap and the reassigning step comprises reassigning the binary digital values to multi-bit digital values (paragraphs 0119, 0120, 0121).

With regard to claim 13, Matsukubo discloses wherein the reassigning step comprises increasing the value of edge pixels with respect to interior pixels (paragraph 0128).

With regard to claim 14, Matsukubo discloses wherein the reassigning step comprises decreasing the value of edge pixels with respect to interior pixels (paragraphs 0127, 0129).

With regard to claim 15, Matsukubo discloses further comprising performing the defining and reassigning steps two or more times (paragraphs 0126, 0127, 0128).

With regard to claim 16, Matsukubo discloses a method of printing an image utilizing a printer having print nonuniformities (paragraphs 0012, 0025), the method comprising the steps of: identifying the printer print nonuniformities; converting the image into a digital bitmap (paragraph 0027) comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information (paragraphs 0028, 0122); defining each pixel as either a background pixel, interior pixel, or an edge pixel (paragraphs 0043, 0044, 0045, 0046, 0122); and, reassigning the digital value of one or more edge pixels or interior pixels independently, thereby altering the appearance of the image when printed in order to compensate for the printer nonuniformities (paragraphs 0125, 0126, 0127, 0129).

With regard to claim 17, Matsukubo discloses further comprising classifying edge pixels by direction and reassigning the digital value of the edge pixels as a function of direction (paragraph 0128, 0129).

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With regard to claim 18, Matsukubo discloses wherein the reassigning step comprises reassigning multiple interior pixel values (paragraph 0126).

With regard to claim 19, Matsukubo discloses an apparatus (paragraph 0091) for altering the appearance of an image printed on a printer having print nonuniformities (paragraph 0012), the printer utilizing input digital image data comprised of an array of pixels and wherein each pixel is assigned a digital value representing marking information (paragraphs 0028), the apparatus comprising a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel (paragraphs 0043,0044,0045, 0046, 0122); and reassigning the digital value of one or more of the edge pixels or interior pixels independently in order to compensate for the printer nonuniformities (paragraphs 0125,0126,0127,0129).

With regard to claim 20, Matsukubo discloses further comprising classifying edge pixels by direction and reassigning the digital value of the edge pixels as a function of direction (paragraph 0128,0129).

With regard to claim 21, Matsukubo discloses wherein the digital image data is binary (paragraph 0027).

With regard to claim 22, Matsukubo discloses wherein the digital image data is a multi-bit (paragraph 0015).

With regard to claim 23, Matsukubo discloses wherein reassigning comprises increasing the value of edge pixels with respect to interior pixels (paragraph 0128).

With regard to claim 24, Matsukubo discloses wherein reassigning step comprises decreasing the value of edge pixels with respect to interior pixels (paragraphs 0127, 0129).

With regard to claim 25, Matsukubo discloses wherein the rendering circuit further comprises performing the defining and reassigning steps two or more times (paragraphs 0126, 0127, 0128).

With regard to claim 26, Matsukubo discloses wherein reassigning comprises reassigning multiple interior pixel values (paragraph 0126).

With regard to claim 27, Matsukubo discloses an apparatus (paragraph 0091) for altering the appearance of an input digital image when printed utilizing a printer having print nonuniformities (paragraph 0012) comprising: a raster image processor for converting the image into a digital bitmap comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information (paragraphs 0028); a rendering circuit for defining each pixel as either a background pixel, interior pixel, or an edge pixel (paragraphs 0043, 0044, 0045, 0046, 0122); and, reassigning the digital value of one or more edge pixels or interior pixels independently in order to compensate for the print nonuniformities (paragraphs 0125, 0126, 0127, 0129).

With regard to claim 28, Matsukubo discloses further comprising classifying edge pixels by direction and reassigning the digital value of the edge pixels as a function of direction (paragraph 0128, 0129).

With regard to claim 29, Matsukubo discloses wherein converting comprises converting the image to a binary digital bitmap and the reassigning step comprises

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reassigning the binary digital values to multi-bit digital values (paragraphs 0119,0120,0121).

With regard to claim 30, Matsukubo discloses wherein converting comprises converting the image to a multi-bit digital bitmap and reassigning comprises reassigning the binary digital values to multi-bit digital values (paragraphs 0119,0120,0121).

With regard to claim 31, Matsukubo discloses wherein reassigning comprises increasing the value of edge pixels with respect to interior pixels (paragraph 0128).

With regard to claim 32, Matsukubo discloses wherein reassigning comprises decreasing the value of edge pixels with respect to interior pixels (paragraphs 0127, 0129).

With regard to claim 33, Matsukubo discloses wherein the rendering circuit performs performing the defining and reassigning two or more times (paragraphs 0126, 0127, 0128).

With regard to claim 34, Matsukubo discloses wherein reassigning comprises reassigning multiple interior pixel values (paragraph 0126).

With regard to claim 35, Matsukubo discloses a method of printing an image utilizing a printer having print nonuniformities (paragraphs 0012, 0025), the method comprising the steps of: converting the image into a digital bitmap (paragraph 0027) comprised of an array of pixels wherein each pixel is assigned a digital value representing marking information (paragraphs 0028,0122); defining each pixel as either a background pixel, interior pixel, or an edge pixel; classifying edge pixels by direction

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(paragraphs 0043,0044,0045, 0046, 0122); and, reassigning the digital value of one or more edge pixels as a function of direction (paragraphs 0125,0126,0127,0129).

With regard to claim 36, Matsukubo discloses wherein the converting step comprises converting the image to a binary digital bitmap and the reassigning step comprises reassigning the binary digital values to multi-bit digital values (paragraphs 0119,0120,0121).

With regard to claim 37, Matsukubo discloses wherein the converting step comprises converting the image to a multi-bit digital bitmap and the reassigning step comprises reassigning the binary digital values to multi-bit digital values (paragraphs 0119,0120,0121).

With regard to claim 38, Matsukubo discloses wherein the reassigning step comprises increasing the value of edge pixels with respect to interior pixels (paragraph 0128).

With regard to claim 39, Matsukubo discloses wherein the reassigning step comprises decreasing the value of edge pixels with respect to interior pixels (paragraphs 0127, 0129).

With regard to claim 40, Matsukubo discloses further comprising performing the defining and reassigning steps two or more times (paragraphs 0126, 0127,0128).

With regard to claim 41, Matsukubo discloses wherein the reassigning step comprises reassigning multiple interior pixel values (paragraph 0126).




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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Vo whose telephone number is 5712701121. The examiner can normally be reached on 7:30AM-5:00PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on 5712727406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Quang N. Vo 6/15/07  
Patent Examiner



TWYLER LAMB  
SUPERVISORY PATENT EXAMINER